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Work-related musculoskeletal disorders among health workers - in a Portuguese Hospital



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INTRODUCTION:

Activities related to manual load mobilization can result in a wide range of musculoskeletal disorders. Work-related musculoskeletal disorders (WMSD) represent a significant burden for society in general, for organizations and for workers themselves because they affect the working-age population, contributing to an increase in absenteeism at work, productivity and quality of life of workers (McDermott et al., 2012). In some European countries the burden on WMSD is around 0.5-2% of Gross National Product (GNP) (DGS, 2008). Health professionals suffer more musculoskeletal injuries than other professional groups (Bauman, 2007). Back pain is a major occupational problem among health professionals, being one of the main causes of disability-related absenteeism, directly influenced by work-related factors (Shojaei, Tavafian, Jamshidi & Wagner, 2017). In spite of the "public visibility" that the WMSD currently have, and of the various actions related, directly or indirectly, to the aspects of its diagnosis and prevention, it is not acting in a planned way in the development of the best strategies to improve working conditions (DGS, 2008). The objective of this path is to describe the development of a multifactor intervention program to reduce the incidence of WMSD.

Key words

Work conditions; Occupational Risks; Worker's health; Health Personnel

METHOD:

The total population consisted of the health professionals of a hospital institution of the north of Portugal (n=435). A descriptive longitudinal study with an exploratory nature of action research was developed for a period of 18 months. From the review of the literature, it was possible to highlight the efficiency of the implementation of this type of strategies compared to the programs with only formative strategies (McDermott et al., 2012; Neves & Serranheira, 2014). The study under development includes the following steps (figure 1) This investigation was approved by the board of directors of the institution and the Ethics Committee (opinion N^o 43/2017).

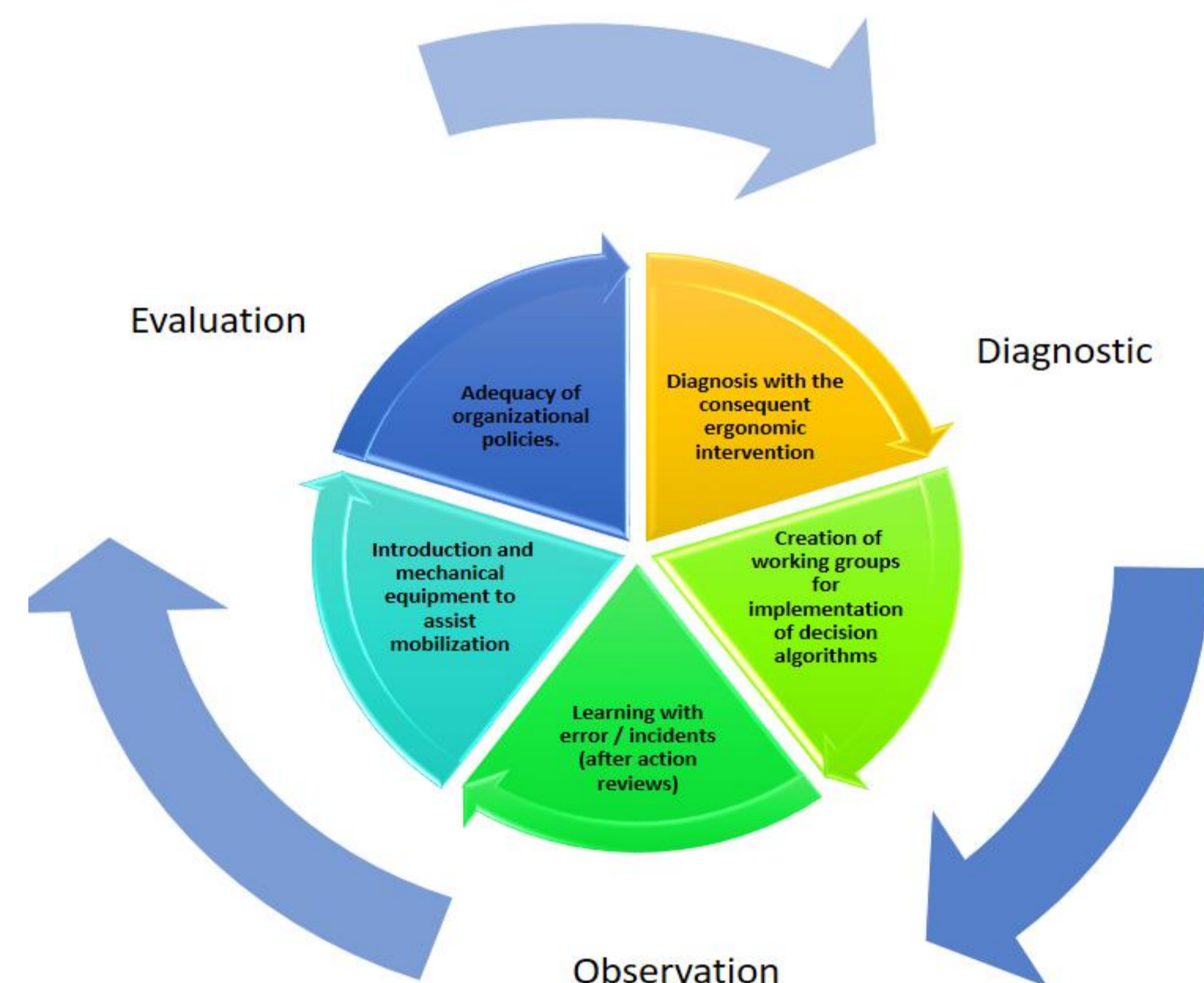


Figure 1: Steps of the study

RESULTS AND DISCUSSION:

The program is in the second stage referring to "Creation of working groups for the implementation of decision algorithms". In the diagnostic phase, two instruments were incorporated into distinct phases, namely the application of a questionnaire and the observation of practices. As regards the application of the questionnaire 105 workers replied to the survey. Respondent professionals show a high prevalence of musculoskeletal complaints associated with work. Self-healing symptoms affect different regions of the body, being more frequent in the spine, particularly in the lower back. Regarding the observation of the practices, of the 149 professionals observed, between nursing auxiliaries and nurses, risk behaviors were identified associated with the inadequate space during the procedure, the fact that the equipment was not positioned properly, the almost non-existent use of the aids techniques and the non-use of patient collaboration to reduce the effort associated with the procedure (Fernandes et al., 2018). These aspects highlight the need for a multifactor intervention to reduce risk.

References:

- Bauman, A. (2007) Ambientes favoráveis à prática: condições no trabalho = cuidados de qualidade. Internacional Council of Nurses. Suíça: Conselho Internacional dos Enfermeiros.
- Cledes, S.A., Haslam, C.O., Haslam, R.A., (2010). What constitutes effective manual handling training? A systematic review. Occupational Medicine, 60, 101e107.
- McDermott, H., M., Haslam, C., Cledes, S., Williams, C., Haslam, R. (2012). Investigation of manual handling training practices in organisations and beliefs regarding effectiveness. *International Journal of Industrial Ergonomics*, 42 (2), 2012, 206-211. Recuperado de <https://doi.org/10.1016/j.ergon.2012.01.003>.
- Neves, M., & Serranheira, F. (2014). A formação de profissionais de saúde para a prevenção de lesões musculoesqueléticas ligadas ao trabalho a nível da coluna lombar: uma revisão sistemática. *Revista Portuguesa de Saúde Pública*, 32(1), 89-105.
- Shojaei, S., Tavafian, S. S., Jamshidi, A. R., & Wagner, J. (2017). A Multidisciplinary Workplace Intervention for Chronic Low Back Pain among Nursing Assistants in Iran. *Asian Spine Journal*, 11(3), 419-426. <https://doi.org/10.4184/asj.2017.11.3.419>
- Fernandes C.S.M.N., Couto G., Carvalho R., Fernandes D.G., Brito L., Carvalho P, et al. (2018). Risk observation in the handling of dependent patients in health professionals of a hospital unit. *Nurs Pract Today*,5(4)
- Direcção Geral de Saúde (2008). Lesões Músculo-Esqueléticas relacionadas com o trabalho – guia de orientação para a prevenção. Programa nacional contra as doenças reumáticas. Ministério da Saúde.

CONCLUSION:

This ongoing study adds data to a growing body of evidence that highlights how health professionals are exposed to a variety of risk factors that cause a high prevalence of symptoms related to work tasks. As Neves & Serranheira (2014) points out, it is necessary to abandon the implementation of intensive training programs on patient handling as a single strategy, isolated and without monitoring its impact over time.